

CYPRAEIDAE FROM AMERICAN SAMOA WITH
NOTES ON SPECIES FROM PALMYRA
ISLAND

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The American Samoa Cypraeidae included here are from Tutuila Island $14^{\circ} 19' S.$, $170^{\circ} 50' W.$, and from Ofu and Tau Islands of the Manna group $14^{\circ} 14' S.$, $169^{\circ} 34' W.$ The localities from which collections were made in the waters about these islands are Ofu, Ofu Island; Luma, Tau Island; and Fagaitua, Nuuli, and Pago Pago, Tutuila Island. Fringing coral reefs in these areas provide an ideal habitat for the cowries. The reefs are exposed at low tides and are quite accessible.

The species included here from Ofu and Tutuila Islands were collected by Mr. L. A. Thurston and Mr. T. Dranga of Honolulu, Hawaii, during December of 1925 and January of 1926. Their collections are now housed in the Bernice P. Bishop Museum, Honolulu. The species from Tau Island were gathered by Mr. W. Harris of the United States Navy in 1937 and are to be deposited in the above museum at a later date.

The habitat of several of the species from Tau are based on collection notes sent to the writer by Mr. Harris. The common species in the waters about Tau Island are *Cypraea annulus* L., *Cypraea caputserpentis* L., *Cypraea moneta* L., and *Cypraea mauritiana* L. *Cypraea annulus* L. and *Cypraea moneta* L. are found in quite similar habitats. These two species occur in abundance in branched coral. They are also to be obtained on the dead coral reef and on coral rocks; however, the latter species is more common than the former when collected under such conditions. *Cypraea poraria* L. and *Cypraea helvola* L. are found in the living coral heads, and under blocks of coral rock on the reef platform. *Cypraea mauritiana* L. is typically found in two habitats; in the tidal zone adhering to black coral rocks, and on the outer edges of the reefs. It occurs in greater abundance in the former locality. *Cypraea erosa* L. and *Cypraea lynx* L. have been collected from branching coral heads as well as in crevices in coral rock. *Cypraea obvelata* Lam. is found in company with *Cypraea an-*

nulus L., but is quite rare. *Cypraea talpa* L. and *Cypraea tigris* L. may be collected in association with living coral heads on the reefs between the tide marks. *Cypraea scurra* Chemn. and *Cypraea caurica* L. were collected by Mr. Harris under pieces of dead coral in Pago Pago Bay on the reef table near Goat Island.

Of the 31 species listed here from Samoa 18 occur in Guam, 17 in Hawaii, and 21 in the Christmas, Palmyra, Washington, and Fanning group of Islands.^{1, 2, 3}

Cypraea annulus Linnaeus. Nuuli, Tutuila Island; Ofu, Ofu Island; Tau Island.

Cypraea arabica Linnaeus. Nuuli, Tutuila Island.

Cypraea arenosa Linnaeus. Nuuli, Tutuila Island.

Cypraea argus Linnaeus. Nuuli, Tutuila Island; Ofu, Ofu Island; Tau Island.

Cypraea asellus Linnaeus. Ofu, Ofu Island; Tau Island.

Cypraea caputserpentis Linnaeus. Nuuli, Tutuila Island; Ofu, Ofu Island; Tau Island.

Cypraea carneola Linnaeus. Ofu, Ofu Island; Tau Island.

Cypraea caurica Linnaeus. Pago Pago, Tutuila Island.

Cypraea cicercula Linnaeus. Pago Pago, Tutuila Island; Tau Island.

Cypraea erosa Linnaeus. Ofu, Ofu Island; Tau Island.

Cypraea erroneus Linnaeus. Tau Island; Pago Pago, Tutuila Island.

Cypraea fimbriata Gmelin. Tau Island.

Cypraea helvola Linnaeus. Tau Island.

Cypraea hirundo Linnaeus. Tau Island.

Cypraea intermedia Gray. Ofu, Ofu Island.

Cypraea isabella Linnaeus. Ofu, Ofu Island; Pago Pago, Tutuila Island.

Cypraea lynx Linnaeus. Ofu, Ofu Island.

Cypraea mappa Linnaeus. Tau Island.

Cypraea mauritiana Linnaeus. Nuuli, Tutuila Island; Ofu, Ofu Island; Tau Island.

Cypraea moneta Linnaeus. Nuuli, Tutuila Island; Ofu, Ofu Island; Tau Island.

Cypraea nucleus Linnaeus. Tau Island.

Cypraea obvellata Lamarek. Tau Island.

¹ Ingram, W. M. *Cypraeidae from Guam*, THE NAUTILUS, Vol. 52, 1938.

² Ingram, W. M. *The Family Cypraeidae in the Hawaiian Islands*, THE NAUTILUS, Vol. 50, 1937.

³ Ingram, W. M. *Cypraeidae from Christmas, Palmyra, Washington, and Fanning Islands*.

- Cypraea poraria* Linnaeus. Ofu, Ofu Island; Tau Island.
Cypraea punctata Linnaeus. Tau Island.
Cypraea reticulata Martyn. Ofu, Ofu Island.
Cypraea scurra Chemnitz. Tau Island.
Cypraea talpa Linnaeus. Nuuuli, Tutuila Island; Tau Island.
Cypraea testudinaria Linnaeus. Pago Pago, Tutuila Island; Tau Island.
Cypraea tigris Linnaeus. Nuuuli, Tutuila Island; Ofu, Ofu Island; Tau Island.
Cypraea ventriculus Lamarek. Fagaitua, Tutuila Island; Ofu, Ofu Island.
Cypraea vitellus Linnaeus. Ofu, Ofu Island.

SPECIES FROM PALMYRA ISLAND

At this time the writer has additions to make to the Cypraeidae fauna of Palmyra Island.⁴ Mr. David Thaanum of Honolulu has informed me that he collected *Cypraea arabica* L. and *Cypraea clandestina* Linnaeus at Palmyra Island. *Cypraea cribraria* L. and *Cypraea goodalli* Gray are also to be added to the cowries occurring at Palmyra Island. The former species is housed in the Bernice P. Bishop Museum collection in Honolulu, and the latter is in the writer's collection. The occurrence of *Cypraea goodalli* Gray at Palmyra Island is a new record in the distribution of this species, and extends its reported range north of the equator to 5° 52' North Latitude. This species has been reported by Garrett from the Cook, Society, and Tuamotu Archipelagos,⁵ and by Hedley from the Ellice and Gilbert Islands.⁶

NOTES AND NEWS

Oreohelix eurekaensis uinta is a new form found by Mr. E. R. Eller during his exploration of 1933 on Hominy Creek, R. 1 W., T. 3 S., 3 miles north Uinta Special Meridian, near Whiterocks, Uinta Co., Utah. It resembles *O. eurekaensis* Henderson and Daniels closely in shape, texture, color and sculpture but differs by the somewhat wider umbilicus, contained about $3\frac{3}{4}$ times in the diame-

⁴ Ingram, W. M. *Cypraeidae from Christmas, Palmyra, Washington, and Fanning Islands*, THE NAUTILUS, Vol. 51, 1937.

⁵ Garrett, A. *Journal of Conchology*, ii, p. 106, 1879.

⁶ Hedley, C. *The Mollusca of Funafuti*, Pt. 1, Memoirs of Australian Museum, p. 450, 1899.